Case/Application number: 10596086 PALM

Priority App. Filing Date:

Format for Search Results: SCORE

Meaning of unusual acronyms or initialisms:

Identify the novelty:

#### Additional Comments:

Search compounds of claim 4, including where the benzene substituent can be in any position, any free position can have lower alkyl, and any lower alkyl can be hydrogen.

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FILE COVERS 1907 - 5 Jan 2010 VOL 152 ISS 2

FILE LAST UPDATED: 4 Jan 2010 (20100104/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

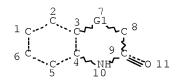
HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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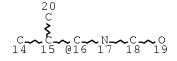
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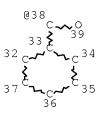
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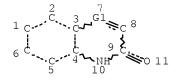


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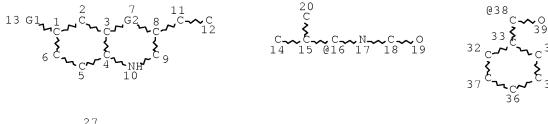
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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

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L14 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L13

=> d ibib abs hitstr 114 1-8

L14 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2007:1452342 HCAPLUS Full-text

DOCUMENT NUMBER: 148:158850

TITLE: Comparative Molecular Field Analysis of quinoline

derivatives as selective and noncompetitive mGluR1

antagonists

AUTHOR(S): Sekhar, Y. Nataraja; Nayana, M. Ravi Shashi;

Ravikumar, Muttineni; Mahmood, S. k.

CORPORATE SOURCE: Bioinformatics Division, Department of Environmental

Microbiology, Osmania University, Hyderabad, India

SOURCE: Chemical Biology & Drug Design (2007), 70(6), 511-519

CODEN: CBDDAL; ISSN: 1747-0277

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB A 3D-QSAR Comparative Mol. Field Anal. (Co-MFA) of 45 quinoline derivs. as metabotropic glutamate receptor subtype 1 (mGluR1) inhibitors was investigated. The Co-MFA anal. provided a model with q2 value of 0.827 and r2 value of 0.990, in which q2 value of 0.827 and an r2 value of 0.990, in which the good correlation between the inhibitory activities and the steric and electrostatic mol. field around the analogs was observed. The predictive ability of the models was validated using the set of 12 compds. that were not included in the training set of 33 compds. These results provided further understanding of the relationship between the structural features of quinolone derivs. and its activities, which should be applicable to design and find new potential mGluR1 inhibitors.

IT 1003022-60-3

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comparative mol. field anal. of quinoline derivs. as selective and noncompetitive mGluR1 antagonists)

RN 1003022-60-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

$$\overset{\text{MeO}}{\longrightarrow}\overset{\circ}{\bigcirc}\overset{\text{H}}{\longrightarrow}\overset{\circ}{\longrightarrow}\overset{\text{H}}{\longrightarrow}\overset{\circ}{\longrightarrow}$$

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:567163 HCAPLUS Full-text

DOCUMENT NUMBER: 143:78213

TITLE: Preparation of cyclohexylalkyl quinolinone and

quinoxalinone derivatives as poly(ADP-ribose)

polymerase (PARP) inhibitors

INVENTOR(S): Mabire, Dominique Jean-Pierre; Van Dun, Jacobus

Alphonsus Josephus; Somers, Maria Victorina Francisca;

Wouters, Walter Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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| WO 2005 | 0588    | 43  |     | A1  |           | 2005 | 0630 |     | WO 2 | 004-            | EP13 | 165 |     | 2   | 0041 | 118  |  |  |  |
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PRIORITY APPLN. INFO.:
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:78213; MARPAT 143:78213 GI

AB Title compds. I [n = 0-1; m = 0-1; X = N, CR4; Y = N, CH; Q = NH, O, CO, etc.; R1 = alkyl, thienyl; R2 = H or together with R3 may form O; R3 = H, alkyl, OH, etc. or R3 = (CH2)pZ; R4 = H or together with R1 may form (CH=CH)2; p = 0-2; Z = (un)substituted heterocycle] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of poly(ADP-ribose) polymerase (PARP). Thus, e.g., II was prepared by reaction of 3-ethyl-2(1H)-quinolinone with chloro-acetyl chloride followed by coupling with piperidine and subsequent reduction The inhibitory activity of I towards PARP-1 was evaluated in scintillation proximity assays and in filtration assays and it was revealed that compds. of the invention

displayed inhibitory activity at initial test concns. of 10-6 and 10-5 M, resp. I as inhibitors of poly(ADP-ribose) polymerase should prove useful in the treatment of PARP-1 mediated disorders. Pharmaceutical compns. comprising I are disclosed.

IT 855444-04-1P

CN

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 855444-04-1 HCAPLUS

2(1H)-Quinolinone, 6-[cyclohexyl[2-(dimethylamino)ethoxy]methyl]-3-ethyl-(CA INDEX NAME)

IT 855444-06-3P 855444-08-5P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 855444-06-3 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(S)-cyclohexyl[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 855444-08-5 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(R)-cyclohexyl[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

IT 855444-38-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 855444-38-1 HCAPLUS

CN 2(1H)-Quinolinone, 6-(cyclohexylhydroxymethyl)-3-ethyl- (CA INDEX NAME)

IT 854523-93-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 854523-93-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylhydroxymethyl)-3-ethyl- (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:523430 HCAPLUS Full-text

DOCUMENT NUMBER: 143:60003

TITLE: Preparation of 6-substituted 2-quinolinones and

2-quinoxalinones as poly(ADP-ribose) polymerase

inhibitors

INVENTOR(S): Mabire, Dominique Jean-Pierre; Guillemont, Jerome

Emile Georges; Van Dun, Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters, Walter

Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|       |      |      |      |     |     |     | APPLICATION NO. |      |     |    |        |      | DATE<br> |     |     |      |     |
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|       | 2007 |      |      |     | A1  |     | 2007            |      |     |    | 2006-  |      |          |     |     | 0060 |     |
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|       | 2006 |      |      |     | А   |     | 2006            | 0628 |     |    | 2006-  |      |          |     |     | 0060 |     |
| DRITY | APP: | LN.  | INFO | .:  |     |     |                 |      |     |    | 2003-  |      |          |     |     |      |     |
|       |      |      |      |     |     |     |                 |      |     | WO | 2004-  | EP13 | 164      |     | W 2 | 0041 | 118 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT CASREACT 143:60003; MARPAT 143:60003 OTHER SOURCE(S): GΙ

ΙT

AΒ The title compds. I [n = 0-2; X = N, CR5; R5 = H or taken together with R1 may formCH:CHCH:CH; R1 = alkyl, thienyl; R2 = H, OH, or taken together with R3 or R4 may form O; R3 = OH, OR8, SR9, etc.; R8 = alkyl, alkylcarbonyl, dialkylaminoalkyl; R9 = dialkylaminoalkyl; R4 = H, alkyl, furanyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from 1-(4-amino-3-nitrophenyl)-2-methyl-1-propanone, was given. Theexemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed. 854523-79-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)
854523-79-8 HCAPLUS

CN 2(1H) -Quinolinone, 6-[2-(dimethylamino)acetyl]-3-ethyl- (CA INDEX NAME)

$$Me2N-CH2-C$$

RN

IT 854523-77-6P 854523-81-2P 854523-83-4P 854523-93-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854523-77-6 HCAPLUS

CN Formamide, N-[1-(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyl)-2-methylpropyl]- (CA INDEX NAME)

RN 854523-81-2 HCAPLUS
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RN 854523-83-4 HCAPLUS
CN 2(1H)-Quinolinone, 6-[2-(dimethylamino)-1-hydroxyethyl]-3-ethyl- (CA INDEX NAME)

RN 854523-93-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylhydroxymethyl)-3-ethyl- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

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REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:523424 HCAPLUS Full-text

DOCUMENT NUMBER: 143:60001

TITLE: Preparation of 6-alkenyl and 6-phenylalkyl substituted

2-quinolinones and 2-quinoxalinones as

poly(ADP-ribose) polymerase inhibitors

INVENTOR(S): Mabire, Dominique Jean-pierre; Guillemont, Jerome

Emile Georges; Van Dun, Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters, Walter

Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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|     |          | LK,      | LR,    | LS, | LT,    | LU, | LV,                              | MA,  | MD, | MG,      | MK,  | MN,      | MW,     | MX, | MZ, | NA,                        | NI,     |
|     |          | NO,      | NZ,    | OM, | PG,    | PH, | PL,                              | PT,  | RO, | RU,      | SC,  | SD,      | SE,     | SG, | SK, | SL,                        | SY,     |
|     |          | ТJ,      | TM,    | TN, | TR,    | TT, | TZ,                              | UA,  | UG, | US,      | UZ,  | VC,      | VN,     | YU, | ZA, | ZM,                        | ZW      |
|     | RW:      | BW,      | GH,    | GM, | KE,    | LS, | MW,                              | MZ,  | NA, | SD,      | SL,  | SZ,      | TZ,     | UG, | ZM, | ZW,                        | AM,     |
|     |          | ΑZ,      | BY,    | KG, | KΖ,    | MD, | RU,                              | ΤJ,  | TM, | AT,      | BE,  | BG,      | CH,     | CY, | CZ, | DE,                        | DK,     |
|     |          | EE,      | ES,    | FI, | FR,    | GB, | GR,                              | HU,  | ΙE, | IS,      | IT,  | LU,      | MC,     | NL, | PL, | PT,                        | RO,     |
|     |          | SE,      | SI,    | SK, | TR,    | BF, | ВJ,                              | CF,  | CG, | CI,      | CM,  | GΑ,      | GN,     | GQ, | GW, | $\mathrm{ML}_{ m{\prime}}$ | MR,     |
|     |          | ΝE,      | SN,    | TD, | TG     |     |                                  |      |     |          |      |          |         |     |     |                            |         |
| ΑU  | 2004     | 2950     | 58     |     | A1     |     | 20050616 AU 2004-295058 20041118 |      |     |          |      |          | 118     |     |     |                            |         |

| CA       | 2546 | 300  |      |     | A1  | 2   | 005  | 0616 | CZ    | A  | 2004 | -25 | 463 | 300  |     | 2   | 0041 | 118 |
|----------|------|------|------|-----|-----|-----|------|------|-------|----|------|-----|-----|------|-----|-----|------|-----|
| EP       | 1687 | 277  |      |     | A1  | 2   | 006  | 0809 | E     | >  | 2004 | -81 | 960 | 01   |     | 2   | 0041 | 118 |
|          | R:   | ΑT,  | BE,  | CH, | DE, | DK, | ES,  | FR,  | GB, ( | GR | , IT | , L | I,  | LU,  | NL, | SE, | MC,  | PT, |
|          |      | IE,  | SI,  | FI, | RO, | CY, | TR,  | BG,  | CZ, E | ΞE | , HU | , P | L,  | SK,  | IS  |     |      |     |
| CN       | 1882 | 547  |      |     | Α   | 2   | 006  | 1220 | Cl    | 1  | 2004 | -80 | 034 | 4176 |     | 2   | 0041 | 118 |
| BR       | 2004 | 0162 | 06   |     | Α   | 2   | 006  | 1226 | BI    | 2  | 2004 | -16 | 206 | 6    |     | 2   | 0041 | 118 |
| JP       | 2007 | 5115 | 74   |     | Τ   | 2   | 007  | 0510 | JI    | 2  | 2006 | -54 | 033 | 38   |     | 2   | 0041 | 118 |
| SG       | 1505 | 33   |      |     | A1  | 2   | 009  | 0330 | SC    | 3  | 2009 | -11 | 97  |      |     | 2   | 0041 | 118 |
| US       | 2007 | 0072 | 342  |     | A1  | 2   | 2007 | 0329 | US    | 5  | 2006 | -59 | 589 | 91   |     | 2   | 0060 | 518 |
| IN       | 2006 | DN02 | 313  |     | Α   | 2   | 2007 | 0803 | II    | V  | 2006 | -DN | 282 | 13   |     | 2   | 0060 | 518 |
| MX       | 2006 | 0056 | 37   |     | Α   | 2   | 006  | 0817 | MΣ    | Χ  | 2006 | -56 | 87  |      |     | 2   | 0060 | 519 |
| ZA       | 2006 | 0040 | 75   |     | Α   | 2   | 007  | 0926 | ZI    | 4  | 2006 | -40 | 75  |      |     | 2   | 0060 | 519 |
| KR       | 2006 | 1153 | 93   |     | Α   | 2   | 006  | 1108 | KI    | 3  | 2006 | -71 | 020 | 01   |     | 2   | 0060 | 525 |
| ИО       | 2006 | 0028 | 94   |     | Α   | 2   | 006  | 0809 | NO    | )  | 2006 | -28 | 94  |      |     | 2   | 0060 | 620 |
| PRIORITY | APP: | LN.  | INFO | .:  |     |     |      |      | WC    | C  | 2003 | -EP | 130 | 028  |     | A 2 | 0031 | 120 |
|          |      |      |      |     |     |     |      |      | EF    | -  | 2003 | -78 | 860 | C    |     | A 2 | 0031 | 205 |
|          |      |      |      |     |     |     |      |      | WC    | )  | 2003 | -EP | 130 | Э    |     | A 2 | 0031 | 120 |
|          |      |      |      |     |     |     |      |      | WC    | C  | 2004 | -EP | 131 | 163  |     | W 2 | 0041 | 118 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:60001; MARPAT 143:60001 GI

$$\stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow}$$

The title compds. I [n = 0-2; X = N, CR7; R7 = H or taken together with R1 may form CH:CHCH:CH; R1 = alkyl, thiophenyl; R2 = H, OH, alkyl, alkynyl or taken together with R3 may form O; R3 = OH, OR10, SR11, etc.; R10, R11 = CHO, alkyl, (alkyl)amino, etc.; R4-R6 = H, halo, trihalomethyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from bromobenzene and 3-methyl-6-quinolinecarboxaldehyde, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

II 854532-59-5P 854534-00-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and

2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854532-59-5 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)carbonyl]-3-ethyl-(CA INDEX NAME)

RN 854534-00-2 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(hydroxyphenylmethyl)- (CA INDEX NAME)

IT 854532-60-8P 854532-69-7P 854532-85-7P

854533-23-6P 854533-42-9P 854533-51-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854532-60-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(acetyloxy)phenylmethyl]-3-ethyl- (CA INDEX NAME)

RN 854532-69-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-(1,3-benzodioxol-5-ylhydroxymethyl)-3-ethyl- (CA INDEX NAME)

RN 854532-85-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[2-(dimethylamino)ethoxy]phenylmethyl]-3-ethyl- (CA INDEX NAME)

RN 854533-23-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)[2-(dimethylamino)ethoxy]methyl]-3-ethyl-, ethanedioate (2:3) (CA INDEX NAME)

CM 1

CRN 854533-22-5 CMF C24 H28 N2 O4

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 854533-42-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(3-chlorophenyl)[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)

$$\begin{array}{c} \text{Me2N-CH2-CH2-O} \\ \text{Cl} \end{array} \begin{array}{c} \text{CH} \end{array} \begin{array}{c} \text{H} \\ \text{N} \end{array} \begin{array}{c} \text{O} \\ \text{Et} \end{array}$$

RN 854533-51-0 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[2-(dimethylamino)ethoxy][3-(trifluoromethyl)phenyl]methyl]-3-ethyl-, ethanedioate (1:1) (CA INDEX

NAME)

CM 1

CRN 854533-50-9 CMF C23 H25 F3 N2 O2

$$\begin{array}{c} \operatorname{Me2N-CH2-CH2-O} \\ \operatorname{F3C} \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

IT 854534-40-0P 854534-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854534-40-0 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)hydroxymethyl]-3-ethyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \end{array}$$

RN 854534-42-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-benzoyl-3-ethyl- (CA INDEX NAME)

(2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:80538 HCAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 142:316680

TITLE: Synthesis, Structure-Activity Relationship, and

Receptor Pharmacology of a New Series of Quinoline Derivatives Acting as Selective, Noncompetitive mGlul

Antagonists

AUTHOR(S): Mabire, Dominique; Coupa, Sophie; Adelinet,

Christophe; Poncelet, Alain; Simonnet, Yvan; Venet,

Marc; Wouters, Ria; Lesage, Anne S. J.; Van Beijsterveldt, Ludy; Bischoff, Francois

CORPORATE SOURCE: Department of Medicinal Chemistry, Johnson & Johnson

Pharmaceutical Research Development, Val de Reuil,

F-27106, Fr.

SOURCE: Journal of Medicinal Chemistry (2005), 48(6),

2134-2153

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:316680

GI

AB Acyl-substituted quinolines and fused quinolines such as I and II are prepared as noncompetitive antagonists of the metabotropic glutamate receptor mGluR1; their activities in recombinant and human mGluR1 and the metabolic stabilities of some of the compds. in human liver microsomes are determined

Methoxycyclohexylcarbonylquinoline I is prepared and found to be a mGlul antagonist with an IC50 value of 20 pM for the rat mClul recomber. Using I as a load compound

with an IC50 value of 20 nM for the rat mGlul receptor. Using I as a lead compound, other quinolines are prepared and tested for antagonism of mGluR1; cismethoxycyclohexanecarbonylpyranoquinoline II is found to antagonize human mGluR1 in a signal transduction-mediated assay with an IC50 value of 0.55 nM. 77% Of a 30  $\mu$ M solution of II is metabolized by human liver microsomes in 30 min.; analogous data for other quinolines are obtained.

IT 409340-70-1P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, structure-activity relationships, and metabolic stabilities of quinolines and fused quinolines prepared as competitive antagonists for the metabotropic glutamate receptor mGluR1)

RN 409340-70-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

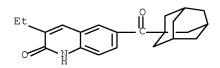
IT 409344-33-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, structure-activity relationships, and metabolic stabilities of quinolines and fused quinolines prepared as competitive antagonists for the metabotropic glutamate receptor mGluR1)

RN 409344-33-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS

RECORD (27 CITINGS)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:796538 HCAPLUS Full-text

DOCUMENT NUMBER: 139:323440

TITLE: Preparation of radiolabeled quinolines and

quinolinones as metabotropic glutamate receptor mGluR1 antagonists for use in positron emission tomography. Lesage, Anne Simone Josephine; Bischoff, Francois

INVENTOR(S): Lesage, Anne Simone Josephine; Bischoff, Francois Paul; Janssen, Cornelus Gerardus Maria; Lavreysen,

Hilde

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|         |              | ENT NO. KIND DATE |         |     |         |     |      |      |     |    |                |          |     |     |     |      |       |
|---------|--------------|-------------------|---------|-----|---------|-----|------|------|-----|----|----------------|----------|-----|-----|-----|------|-------|
| WC      | 2003         | 0823              | 50      |     | A2      |     | 2003 | 1009 |     |    | 2003-          |          |     |     |     | 0030 |       |
|         |              |                   |         |     |         |     |      |      |     | ВВ | , BG,          | BR,      | BY, | BZ, | CA, | CH,  | CN,   |
|         |              | •                 | •       | •   | •       |     | •    | •    | •   |    | , EE,          | •        | •   | •   | •   | •    | •     |
|         |              | GM,               | HR,     | HU, | ID,     | IL, | IN,  | IS,  | JP, | KE | , KG,          | KP,      | KR, | KΖ, | LC, | LK,  | LR,   |
|         |              |                   |         |     |         |     |      |      |     |    | , MW,          |          |     |     |     |      |       |
|         |              | PH,               | PL,     | PT, | RO,     | RU, | SC,  | SD,  | SE, | SG | , SK,          | SL,      | ΤJ, | TM, | TN, | TR,  | TT,   |
|         |              | TZ,               | UA,     | UG, | US,     | UΖ, | VC,  | VN,  | YU, | ZA | , ZM,          | ZW       |     |     |     |      |       |
|         | RW:          | GH,               | GM,     | ΚE, | LS,     | MW, | MZ,  | SD,  | SL, | SZ | , TZ,          | UG,      | ZM, | ZW, | AM, | ΑZ,  | BY,   |
|         |              | KG,               | KΖ,     | MD, | RU,     | ТJ, | TM,  | AT,  | BE, | ВG | , СН,          | CY,      | CZ, | DE, | DK, | EE,  | ES,   |
|         |              | FI,               | FR,     | GB, | GR,     | HU, | IE,  | ΙΤ,  | LU, | MC | , NL,          | PT,      | RO, | SE, | SI, | SK,  | TR,   |
|         |              | BF,               | ВJ,     | CF, | CG,     | CI, | CM,  | GA,  | GN, | GQ | , GW,          | ML,      | MR, | NE, | SN, | TD,  | ΤG    |
|         | 2479         |                   |         |     |         |     |      |      |     |    | 2003-          |          |     |     |     | 0030 | 326   |
|         | 2003         |                   |         |     |         |     |      |      |     | AU | 2003-          | 2267     | 37  |     | 2   | 0030 | 326   |
| _       | 2003         | _                 | _       |     |         |     | 2008 |      |     |    |                |          |     |     |     |      |       |
|         | 2003         |                   | 45      |     | А       |     |      |      |     |    | 2003-          |          |     |     |     |      |       |
| EF      | 1492         |                   |         |     |         |     |      |      |     |    | 2003-          |          |     |     |     |      |       |
|         | R:           | •                 | •       | •   | •       | •   | •    | •    | •   |    | , IT,          | •        | •   | •   | •   | •    | •     |
|         |              |                   |         |     |         |     |      |      |     |    | , TR,          |          |     |     |     |      |       |
|         | 1642         |                   |         |     | A       |     |      |      |     |    | 2003-          |          |     |     |     | 0030 |       |
|         | 2005         |                   |         |     |         |     |      |      |     |    | 2003-          |          |     |     |     | 0030 |       |
|         | 5354         |                   | C 2 1   |     | A       |     | 2006 |      |     |    | 2003-          |          |     |     |     | 0030 |       |
|         | 2004         |                   |         |     |         |     | 2005 |      |     |    | 2004-          |          |     |     |     | 0040 |       |
|         | 2006<br>7517 |                   | 6/6     |     |         |     | 2006 | -    |     | US | 2004-          | 5090     | 69  |     | 2   | 0040 | 924   |
|         | 2004         | -                 |         |     | BZ<br>A |     | 2009 | -    |     | MV | 2004-          | 0/25     |     |     | 2   | 0040 | മാഠ   |
|         | 2004         |                   |         |     | A       |     | 2005 |      |     |    | 2004-<br>2004- |          |     |     |     | 0040 |       |
|         | 2004         |                   |         |     | A       |     | 2003 |      |     |    | 2004-          |          |     |     |     | 0040 |       |
| PRIORIT |              |                   |         |     | Α       |     | 2004 | 102/ |     |    | 2004-<br>2002- |          |     |     |     |      |       |
| IMIONII | I AFF        | тти •             | T141 () | • • |         |     |      |      |     |    | 2002-<br>2003- |          |     |     |     | 0020 |       |
|         |              |                   |         |     |         |     |      |      |     | VV | 2005-          | ے رے عرب | - U |     | v   | 0000 | J Z U |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 139:323440
GI

AB Radiolabeled title compds. [I, II; X = O, S, C(R6)2, NR7; Y = O, S; R1 = (substituted) alkyl, cycloalkyl, cycloalkylalkyl, thienyl, quinolinyl, etc.; R2 = H, halo, cyano, alkyl, amino, heterocyclyl, etc.; R3, R4 = H, halo, OH, cyano, alkyl, alkoxy, etc.; R2R3 = (CH2)3-6, Z4CH2CH2CH2, Z4CH2CH2, etc.; Z4 = O, S, SO2, NR11; R11 = H, alkyl, PhCH2, alkoxycarbonyl; R3R4 = (CH2)4, CH:CHCH:CH; R5 = H, cycloalkyl, piperidinyl, oxothienyl, tetrahydrothienyl, aralkyl, alkoxyalkyl, etc.;

R6 = H, aryl, alkyl, aminoalkyl; R7 = amino, OH], were prepared Most preferred are radiolabeled compds. in which the radioactive isotope is selected from 3H, 11C and 18F. The invention also relates to their use in a diagnostic method, in particular for marking and identifying a mGluR1 receptor in biol. material, as well as to their use for imaging an organ, in particular using positron emission tomog. (PET). Thus, title compound (III) was prepared by tritiation of the corresponding bromide in THF using tritium gas and Pd/C catalyst. The purified product showed specific activity of 25 Ci/mmol.

```
409340-69-8P
                   409340-70-1P
                                   409341-02-2P
ΙT
     409344-31-6P
                    409344-32-7P
                                   409344-33-8P
     409344-34-9P
                  409344-35-0P
                                   409344-36-1P
     409344-37-2P
                  409344-38-3P
                                   409344-39-4P
                  409344-50-9P
     409344-45-2P
                                   409344-62-3P
     409344-64-5P
                    409344-66-7P
                                   409344-72-5P
     409344-83-8P
                   409344-85-0P
                                   409345-13-79
     409345-52-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of radiolabeled quinolines and quinolinones as metabotropic
        glutamate receptor mGluR1 antagonists for use in positron emission
        tomog.)
     409340-69-8 HCAPLUS
RN
CN
     2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]-
     INDEX NAME)
```

Relative stereochemistry.

RN 409340-70-1 HCAPLUS
CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

```
RN 409341-02-2 HCAPLUS
CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]-7-methyl-
(CA INDEX NAME)
```

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\text{O}}{\longrightarrow} \stackrel{\text{O}}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\text{O}}{\longrightarrow} \stackrel{\text{O}$$

RN 409344-31-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)

RN 409344-32-7 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]- (CA INDEX NAME)

$$\text{constant} \quad \text{constant} \quad$$

RN 409344-33-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)- (CA INDEX NAME)

RN 409344-34-9 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

RN 409344-35-0 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[(1R,3S)-3-methoxycyclohexyl]carbonyl]-,
 rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-36-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[(1R,3R)-3-methoxycyclohexyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-37-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[4-(1,1-dimethylethyl)cyclohexyl]carbonyl]-3-ethyl-(CA INDEX NAME)

RN 409344-38-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[4-(1-methylethoxy)cyclohexyl]carbonyl]- (CA INDEX NAME)

$$\text{i-PrO} \bigcirc \bigcirc \bigcirc \qquad \bigcap_{\text{C}} \overset{\text{H}}{\text{N}} \bigcirc \bigcirc$$

RN 409344-39-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

RN 409344-45-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylcarbonyl)-3-ethyl- (CA INDEX NAME)

$$\text{constant} \quad \text{constant} \quad$$

RN 409344-50-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4,4-dimethylcyclohexyl)carbonyl]-3-ethyl- (CA INDEX NAME)

RN 409344-62-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text$$

RN 409344-64-5 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\text{O}}{\longrightarrow} \stackrel{\text{Et}}{\longrightarrow}$$

RN 409344-66-7 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

$$\stackrel{\text{MeO}}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\stackrel{\text{H}}{\longleftarrow}} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\text{H}}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\longrightarrow}{\longrightarrow} \stackrel{\longrightarrow}{\longrightarrow}$$

RN 409344-72-5 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-83-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

RN 409344-85-0 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(trans-4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \\ \end{array}$$

RN 409345-13-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)

RN 409345-52-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]-7-methyl- (CA INDEX NAME)

Relative stereochemistry.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:275968 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:309857

TITLE: Preparation of quinolines and quinolinones as

metabotropic glutamate receptor antagonists

INVENTOR(S):
Mabire, Dominique Jean-Pierre; Venet, Marc Gaston;

Coupa, Sophie; Poncelet, Alain Philippe; Lesage, Anne

Simone Josephine

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
|               |      |          |                 |          |
| WO 2002028837 | A1   | 20020411 | WO 2001-EP11135 | 20010925 |

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                        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
                        PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
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                        BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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A 20030701 BR 2001-14253
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      20030701
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      20030806
      EP 2001-974298
      20010925

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                                                    20030806
20080709
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HU 2003002167 A2 20031028 HU 2003-2167
JP 2004510764 T 20040408 JP 2002-532423
NZ 524945 A 20050128 NZ 2001-524945
EE 200300126 A 20050415 EE 2003-126
EE 5195 B1 20090817
CN 1703403 A 20051130 CN 2001-816717
AU 2001293847 B2 20070524 AU 2001-293847
AT 400558 T 20080715 AT 2001-974298
ES 2309095 T3 20081216 ES 2001-974298
IL 155163 A 20090803 IL 2001-155163
KR 818965 B1 20080404 KR 2003-702014
HR 2003000229 A1 20030630 HR 2003-229
IN 2003MN00328 A 20050211 IN 2003-MN328
BG 107672 A 20040130 BG 2003-107672
ZA 2003002515 A 20040630 ZA 2003-2515
NO 2003001474 A 20030505 NO 2003-1474
NO 325079 B1 20080128
MX 2003002907 A 20030624 MX 2003-2907
US 20040082592 A1 20040429 US 2003-381987
US 7115630 B2 20061003
US 20050209273 A1 20050922 US 2005-133678
US 7629468
PRIORITY APPLN. INFO::
         HU 2003002167 A2
                                                       20031028 HU 2003-2167
                                                                                                                       20010925
                                                                                                                     20010925
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      EP 2000-203419
      A 20001002

      WO 2001-EP11135
      W 20010925

      US 2003-381987
      A3 20030814

 OTHER SOURCE(S): MARPAT 136:309857
 GΙ
```

The title compds. [I or II; X = O, C(R6)2; (wherein R6 = H, aryl, alkyl, etc.); R1 = alkyl, aryl, thienyl, etc.; R2 = H, halo, CN, etc.; R3, R4 = H, alkyl; or R2 and R3 may be taken together to form (CH2)3, (CH2)4, CH:CHCH:CH, etc.; or R3 and R4 may be taken together to form CH:CHCH:CH, (CH2)4; R5 = H, cycloalkyl, piperidinyl, etc.; Y = O, S; or Y and R5 may be taken together to form CH:NN, N:NN, NCH:CH], useful for treating or preventing glutamate-induced diseases of the central nervous system, were prepared Thus, reacting cis-III [R = C1] with SnMe4 in the presence of Pg(PPh3)4 in PhMe afforded 17% cis-III [R = Me] which showed antagonism at a dose of 2.5 mg/kg bodyweight in cold allodynia test in rats with a Bennett ligation.

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists)

RN 409340-70-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

ΙT 409340-69-8P 409341-02-2P 409344-31-6P 409344-32-79 409344-33-8P 409344-34-9P 409344-35-0P 409344-36-1P 409344-37-29 409344-38-3P 409344-39-4P 409344-45-2P 409344~50~9P 409344-62-3P 409344-64-5P 409344-66-7P 409344-72-5P 409344-83-8P 409344-85-0P 409345-13-7P 409345-52-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists)

RN 409340-69-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 409341-02-2 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]-7-methyl-(CA INDEX NAME)

Relative stereochemistry.

RN 409344-31-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)

RN 409344-32-7 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]- (CA INDEX NAME)

RN 409344-33-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)- (CA INDEX NAME)

RN 409344-34-9 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

RN 409344-35-0 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[(1R,3S)-3-methoxycyclohexyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-36-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[(1R,3R)-3-methoxycyclohexyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-37-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[4-(1,1-dimethylethyl)cyclohexyl]carbonyl]-3-ethyl-(CA INDEX NAME)

RN 409344-38-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[4-(1-methylethoxy)cyclohexyl]carbonyl]- (CA INDEX NAME)

RN 409344-39-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-45-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylcarbonyl)-3-ethyl- (CA INDEX NAME)

$$\bigcap_{\mathbb{C}}\bigcap_{\mathbb$$

RN 409344-50-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4,4-dimethylcyclohexyl)carbonyl]-3-ethyl- (CA INDEX NAME)

$$\text{Me} \overset{\circ}{\longrightarrow} \overset{\circ}{\longleftarrow} \overset{\text{H}}{\longrightarrow} \overset{\circ}{\longrightarrow} \overset{\circ}{\longrightarrow} \overset{\text{H}}{\longrightarrow} \overset{\circ}{\longrightarrow} \overset{\circ}{\longrightarrow} \overset{\text{H}}{\longrightarrow} \overset{\circ}{\longrightarrow} \overset{\circ}{$$

RN 409344-62-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

$$\stackrel{\mathsf{MeO}}{\longleftarrow} \stackrel{\mathsf{H}}{\longleftarrow} \stackrel{\mathsf{O}}{\longleftarrow} \stackrel{\mathsf{Et}}{\longleftarrow}$$

RN 409344-64-5 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-66-7 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

RN 409344-72-5 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 409344-83-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\stackrel{\text{H}}{\longrightarrow}} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\longrightarrow}{\longrightarrow} \stackrel{\longrightarrow}{\longrightarrow} \stackrel{\longrightarrow}{\longrightarrow$$

RN 409344-85-0 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(trans-4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

Relative stereochemistry.

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text{MeO}}{\longrightarrow} \stackrel{\text{Pr-n}}{\longrightarrow}$$

RN 409345-13-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)

RN 409345-52-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]-7-methyl- (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} \text{MeO} \\ \\ \end{array}$$

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS

RECORD (18 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:527827 HCAPLUS Full-text

DOCUMENT NUMBER: 134:162992

TITLE: Synthesis and antimicrobial activities of some novel

quinoxalinone derivatives

AUTHOR(S): Ali, M. M.; Ismail, M. M. F.; El-Gaby, M. S. A.;

Zahran, M. A.; Ammar, Y. A.

CORPORATE SOURCE: Dep. of Chemistry, Faculty of Science, Al-Azhar Univ.,

Cairo, 11884, Egypt

SOURCE: Molecules [online computer file] (2000), 5(6), 864-873

CODEN: MOLEFW; ISSN: 1420-3049

URL: http://www.mdpi.org/molecules/papers/50600864.pdf

PUBLISHER: Molecular Diversity Preservation International

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:162992

GΙ

AB Condensation of 4-benzoyl-1,2-phenylenediamine with sodium pyruvate in acetic acid furnished two products, which were identified as 6-benzoyl- (I) and 7-benzoyl-3-methyl-2(1H)-quinoxalinone (II). Fusion of I with aromatic aldehydes furnished the styryl derivs. Alkylation of I and II with di-Me sulfate or Et chloroacetate produced the N-alkyl derivs. Hydrazinolysis of one ester derivative with hydrazine hydrate afforded the hydrazide derivative, which underwent condensation with aldehydes to give the corresponding hydrazone derivs. In addition, chlorination of I with thionyl chloride afforded the 2-chloro derivative, which was subjected to reaction with sodium azide and n-butylamine to yield the corresponding tetrazolo (III) and n-butylamino (IV) derivs., resp. The structures of the compds. prepared were confirmed by anal. and spectral data. Also, some of the synthesized compds. were screened for antimicrobial activity.

IT 325469-54-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-54-3 HCAPLUS

CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-methoxyphenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

$$\Pr \bigcup_{h \in \mathbb{N}} \mathbb{N} = \mathbb{N}$$

IT 325469-53-2P 325469-55-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-53-2 HCAPLUS

CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-chlorophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c} O \\ Ph \\ \hline \\ N \\ \hline \\ N \\ \hline \\ O \end{array}$$

RN 325469-55-4 HCAPLUS

CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]-(CA INDEX NAME)

Double bond geometry as shown.

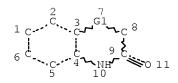
OS.CITING REF COUNT: 39 THERE ARE 39 CAPLUS RECORDS THAT CITE THIS

RECORD (39 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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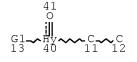


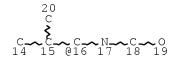
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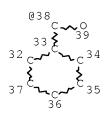
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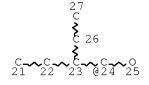
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NUMBER OF NODES IS 31

STEREO ATTRIBUTES: NONE L9 STR



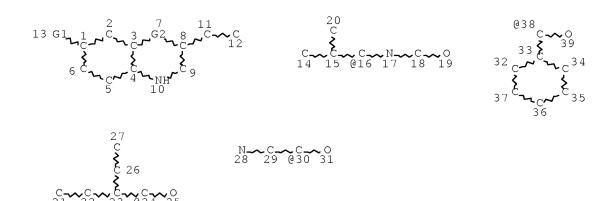
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STEREO ATTRIBUTES: NONE

L11 87 SEA FILE=REGISTRY SUB=L3 SSS FUL L6 AND L9

L12 STR



VAR G1=16/24/30/38

VAR G2=CH/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

L13 48 SEA FILE=REGISTRY SUB=L11 SSS FUL L12
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L15 39 SEA FILE=REGISTRY ABB=ON PLU=ON L11 NOT L13

L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

L17 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 NOT L14

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L17 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2009:1501809 HCAPLUS Full-text

DOCUMENT NUMBER: 152:12347

TITLE: Spiro[pyrazolopyran-piperidine] ketones as acetyl-CoA

carboxylase inhibitors and their preparation,

pharmaceutical compositions and use in the treatment

of diseases

INVENTOR(S): Corbett, Jeffrey Wayne; Elliott, Richard Louis;

Freeman-Cook, Kevin Daniel; Griffith, David Andrew;

Phillion, Dennis Paul

PATENT ASSIGNEE(S): Pfizer, Inc., USA

SOURCE: PCT Int. Appl., 147pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
|               |      |          |                 |          |
| WO 2009144554 | A1   | 20091203 | WO 2009-IB5649  | 20090518 |

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             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            US 2008-56652P
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                                            US 2008-58689P
                                                                Ρ
                                                                    20080604
                                            US 2009-171519P
                                                                Ρ
                                                                   20090422
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GΙ

$$\mathbb{R}^{1} - \mathbb{N}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{3}$$

The invention provides compds. of formula I or a pharmaceutically acceptable salt of said compound, pharmaceutical compns. thereof; and the use thereof in treating diseases, conditions or disorders modulated by the inhibition of acetyl-CoA carboxylase enzyme(s) in an animal. Compds. of formula I wherein R1 is C1-4 alkyl, C3-6 cycloalkyl, tetrahydrofuranyl, Bn, etc.; R2 is H, Me and Et; R3 is (un)substituted benzazole, (un)substituted quinolinyl, (un)substituted naphthyl, etc.; and pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their acetyl-CoA carboxylase inhibitory activity. From the assay, it was determined that compound II exhibited IC50 values in the range of 9 - 11 nM.

IT 1197942-50-9P 1197942-52-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spiro[pyrazolopyran-piperidine] ketones as acetyl-CoA carboxylase inhibitors useful in the treatment of acetyl-CoA carboxylase-mediated diseases)

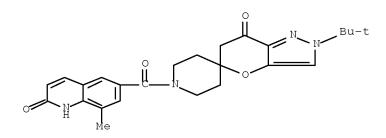
RN 1197942-50-9 HCAPLUS

CN Spiro[piperidine-4,5'(7'H)-pyrano[3,2-c]pyrazol]-7'-one, 1-[(1,2-dihydro-8-methyl-2-oxo-6-quinolinyl)carbonyl]-2'-ethyl-2',6'-

dihydro-3'-methyl- (CA INDEX NAME)

RN 1197942-52-1 HCAPLUS

CN Spiro[piperidine-4,5'(7'H)-pyrano[3,2-c]pyrazol]-7'-one, 1-[(1,2-dihydro-8-methyl-2-oxo-6-quinolinyl)carbonyl]-2'-(1,1-dimethylethyl)-2',6'-dihydro- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2009:247530 HCAPLUS Full-text

DOCUMENT NUMBER: 150:438012

TITLE: Virtual screening for Raf-1 kinase inhibitors based on

pharmacophore model of substituted ureas

AUTHOR(S): Li, Hui-Fang; Lu, Tao; Zhu, Tian; Jiang, Yong-Jun;

Rao, Sha-Sha; Hu, Li-Ye; Xin, Bo-Tao; Chen, Ya-Dong Department of Organic Chemistry, China Pharmaceutical

CORPORATE SOURCE: Department of Organic Chemistry, China Pharmaceuti

University, Nanjing, 210009, Peop. Rep. China

SOURCE: European Journal of Medicinal Chemistry (2009), 44(3),

1240-1249

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Elsevier Masson SAS

DOCUMENT TYPE: Journal LANGUAGE: English

AB A three-dimensional (3D) quant. pharmacophore model was developed from a training set of structurally diverse substituted ureas against Raf-1 kinase, which was well validated to be highly predictive by two methods, namely, test set prediction and Cat-Scramble method. Then a virtual database searching was performed with the pharmacophore model as a 3D query, and the bioactivities of the retrieved hits were predicted by the pharmacophore. Subsequently, mol. docking was carried out on the selected hits whose estimated IC50 was less than 1 µM. Finally, 29 hits were identified as potential leads against Raf-1 kinase, which exhibited good estimated

activities, high docking scores, similar binding mode to exptl. proven compds. and favorable drug-like properties. The study may facilitate the discovery and rational design of novel leads with potent inhibitory activity targeting Raf-1 kinase.

IT 883829-01-4, NCI 0648594

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(virtual screening for Raf-1 kinase inhibitors based on pharmacophore model of substituted ureas)

RN 883829-01-4 HCAPLUS

CN

2-Quinoxalinepropanamide, 6-benzoyl-3,4-dihydro-N-(4-methoxy-2-nitrophenyl)- $\alpha$ ,3-dioxo- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:523429 HCAPLUS Full-text

DOCUMENT NUMBER: 143:60002

TITLE: Preparation of 7-phenylalkyl substituted

2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors

INVENTOR(S): Mabire, Dominique Jean-pierre; Guillemont, Jerome

Emile Georges; Van Dun, Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters, Walter

Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.      | KIND DATE       | APPLICATION NO.         | DATE<br>    |  |  |  |
|-----------------|-----------------|-------------------------|-------------|--|--|--|
| WO 2005054209   | A1 20050616     | WO 2004-EP13162         | 20041118    |  |  |  |
| W: AE, AG, AL,  | AM, AT, AU, AZ, | BA, BB, BG, BR, BW, BY, | BZ, CA, CH, |  |  |  |
| CN, CO, CR,     | CU, CZ, DE, DK, | DM, DZ, EC, EE, EG, ES, | FI, GB, GD, |  |  |  |
| GE, GH, GM,     | HR, HU, ID, IL, | IN, IS, JP, KE, KG, KP, | KR, KZ, LC, |  |  |  |
| LK, LR, LS,     | LT, LU, LV, MA, | MD, MG, MK, MN, MW, MX, | MZ, NA, NI, |  |  |  |
| NO, NZ, OM,     | PG, PH, PL, PT, | RO, RU, SC, SD, SE, SG, | SK, SL, SY, |  |  |  |
| TJ, TM, TN,     | TR, TT, TZ, UA, | UG, US, UZ, VC, VN, YU, | ZA, ZM, ZW  |  |  |  |
| RW: BW, GH, GM, | KE, LS, MW, MZ, | NA, SD, SL, SZ, TZ, UG, | ZM, ZW, AM, |  |  |  |
| AZ, BY, KG,     | KZ, MD, RU, TJ, | TM, AT, BE, BG, CH, CY, | CZ, DE, DK, |  |  |  |
| EE, ES, FI,     | FR, GB, GR, HU, | IE, IS, IT, LU, MC, NL, | PL, PT, RO, |  |  |  |
| SE. ST. SK.     | TR. BF. BJ. CF. | CG, CI, CM, GA, GN, GO, | GW. ML. MR. |  |  |  |

|          |      | ΝE,   | SN,  | TD, | ΤG  |     |      |      |     |    |    |         |      |      |     |     |      |     |
|----------|------|-------|------|-----|-----|-----|------|------|-----|----|----|---------|------|------|-----|-----|------|-----|
| AU       | 2004 | 2950  | 57   |     | A1  | 2   | 0050 | 0616 | P   | U  | 20 | 004 - 2 | 2950 | 57   |     | 2   | 0041 | 118 |
| CA       | 2546 | 002   |      |     | A1  | 2   | 0050 | 0616 | C   | CA | 20 | 004 - 2 | 2546 | 002  |     | 2   | 0041 | 118 |
| EP       | 1709 | 011   |      |     | A1  | 2   | 0063 | 1011 | E   | ΞP | 20 | 004-8   | 3196 | 00   |     | 2   | 0041 | 118 |
|          | R:   | ΑT,   | BE,  | CH, | DE, | DK, | ES,  | FR,  | GB, | GR | ₹, | IT,     | LI,  | LU,  | NL, | SE, | MC,  | PT, |
|          |      | ΙE,   | SI,  | LT, | LV, | FI, | RO,  | MK,  | CY, | ΑL | ٠, | TR,     | BG,  | CZ,  | EE, | HU, | PL,  | SK, |
|          |      | HR,   | IS,  | YU  |     |     |      |      |     |    |    |         |      |      |     |     |      |     |
| CN       | 1882 | 549   |      |     | Α   | 2   | 0063 | 1220 | C   | CN | 20 | 04-8    | 3003 | 4287 |     | 2   | 0041 | 118 |
| BR       | 2004 | 0168  | 17   |     | Α   | 2   | 0070 | 0306 | Е   | 3R | 20 | 04-1    | 1681 | 7    |     | 2   | 0041 | 118 |
| JP       | 2007 | 5130  | 87   |     | T   | 2   | 0070 | 0524 | J   | JΡ | 20 | 06-5    | 5403 | 37   |     | 2   | 0041 | 118 |
| SG       | 1505 | 34    |      |     | A1  | 2   | 0090 | 0330 | S   | G  | 20 | 09-1    | 1198 |      |     | 2   | 0041 | 118 |
| US       | 2008 | 0249  | 099  |     | A1  | 2   | 0083 | 1009 | Ü   | JS | 20 | 06-5    | 5958 | 82   |     | 2   | 0060 | 517 |
| IN       | 2006 | DN02  | 810  |     | Α   | 2   | 0070 | 0803 | I   | Ν  | 20 | 06-I    | N28  | 10   |     | 2   | 0060 | 518 |
| MX       | 2006 | 0056  | 86   |     | Α   | 2   | 0060 | 0817 | M   | ΊX | 20 | 06-5    | 5686 |      |     | 2   | 0060 | 519 |
| ZA       | 2006 | 0040  | 76   |     | Α   | 2   | 0070 | 0926 | Z   | ZΑ | 20 | 06-4    | 4076 |      |     | 2   | 0060 | 519 |
| KR       | 2006 | 1115  | 32   |     | Α   | 2   | 0062 | 1027 | K   | ΚR | 20 | 06-     | 7102 | 00   |     | 2   | 0060 | 525 |
| NO       | 2006 | 00289 | 92   |     | Α   | 2   | 0060 | 0809 | N   | 10 | 20 | 06-2    | 2892 |      |     | 2   | 0060 | 620 |
| PRIORITY | APP  | LN.   | INFO | .:  |     |     |      |      | E   | ΣP | 20 | 03-     | 7865 | 0    | i   | A 2 | 0031 | 120 |
|          |      |       |      |     |     |     |      |      | M   | ΙO | 20 | 04-I    | EP13 | 162  | Ī   | w 2 | 0041 | 118 |
|          |      |       |      |     |     |     |      |      |     |    |    |         |      |      |     |     |      |     |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:60002; MARPAT 143:60002 GI

The title compds. I [n = 0-2; X = N, CR7; R7 = H or taken together with R1 may form CH:CHCH:CH; R1 = alkyl, thienyl; R2 = H, OH, alkyl, alkynyl or taken together with R3 may form O; R3 = OH, OR10, SR11, etc.; R10 = alkyl, alkylcarbonyl, dialkylaminoalkyl; R11 = dialkylaminoalkyl; R4-R6 = H, halo, trihalomethyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from N-[4-(2-oxo-2-phenylethyl)phenyl]acetamide, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

IT 854397-87-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of 7-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854397-87-8 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-7-(hydroxyphenylmethyl)- (CA INDEX NAME)

IT 854398-62-2P 854398-71-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 7-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854398-62-2 HCAPLUS

CN 2(1H)-Quinoxalinone, 7-benzoyl-3-ethyl- (CA INDEX NAME)

RN 854398-71-3 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-7-[[(methylsulfonyl)oxy]phenylmethyl]- (CA INDEX NAME)

$$\begin{array}{c} O & Ph \\ S & O - CH \\ O & N \end{array}$$

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1990:612014 HCAPLUS Full-text

DOCUMENT NUMBER: 113:212014

ORIGINAL REFERENCE NO.: 113:35835a,35838a

TITLE: Preparation of (1H-azol-1-ylmethyl)quinolines,

-quinazolines, and -quinoxalines as drugs

INVENTOR(S): Freyne, Eddy Jean Edgard; Venet, Marc Gaston;

Raeymaekers, Alfons Herman Margaretha; Sanz, Gerard

Charles

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: Eur. Pat. Appl., 106 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.               | KIND D             | DATE      | APPLICATION NO.                 | DATE     |
|--------------------------|--------------------|-----------|---------------------------------|----------|
| EP 371564                | A2 1               |           | EP 1989-203014                  |          |
| EP 371564                |                    | 9910529   |                                 |          |
| EP 371564                | B1 1               | 9950712   |                                 |          |
|                          |                    | FR, GB, G | R, IT, LI, LU, NL, SE           |          |
| US 5028606               |                    | 9910702   | US 1989-434957                  | 19891113 |
| US 5037829               | A 1                | 9910806   | US 1989-435120                  | 19891113 |
| CA 2002864               | A1 1<br>C 1<br>A 1 | 9900529   | CA 1989-2002864                 | 19891114 |
| CA 2002864               | C 1                | 9991116   |                                 |          |
| DK 8905994               | A 1                | 9900530   | DK 1989-5994                    | 19891128 |
| DK 172748                |                    | 9990628   |                                 |          |
|                          |                    | 9900530   | NO 1989-4734                    | 19891128 |
| NO 174509                |                    | 9940207   |                                 |          |
| NO 174509                | C 1                | 9940518   |                                 |          |
| AU 8945646               |                    | 9900607   | AU 1989-45646                   | 19891128 |
| AU 620946                | B2 1               | 9920227   |                                 |          |
| HU 52498                 | A2 1               | 9900728   | HU 1989-6220                    | 19891128 |
| HU 205106                | В 1                | 9920330   |                                 |          |
| ZA 8909076               | A 1                | 9910731   | ZA 1989-9076<br>SU 1989-4742543 | 19891128 |
| SU 1780536               |                    | 9921207   | SU 1989-4742543                 | 19891128 |
|                          |                    | 9930708   | IL 1989-92486                   |          |
| ES 2088889               | T3 1               | 9961001   | ES 1989-203014                  |          |
| FI 101964                | В 1                | 9980930   | FI 1989-5687                    | 19891128 |
| FI 101964                | B1 1               | 9980930   |                                 |          |
| CN 1042912               | A 1                | 9900613   | CN 1989-108925                  | 19891129 |
| CN 1033752               | C 1                | 9970108   |                                 |          |
| JP 02223579              | A 1                | 9900905   | JP 1989-307793                  | 19891129 |
| JP 2916181               | B2 1               | 9990705   |                                 |          |
| US 5151421               |                    | 9920929   | US 1991-672298                  |          |
| US 5185346               |                    | 9930209   | US 1991-704746                  |          |
| US 5268380               |                    | 9931207   | US 1992-973871                  |          |
| US 5441954               |                    | 9950815   | US 1993-131817                  |          |
| CN 1106004               |                    | 9950802   | CN 1994-117801                  | 19941102 |
| CN 1036002               | C 1                | 9971001   |                                 |          |
| CN 1106005               | A 1                | 9950802   | CN 1994-117802                  | 19941102 |
| CN 1036003               | C = 1              | 9971001   |                                 |          |
| US 5612354               | A 1                | 9970318   | US 1995-409551                  | 19950323 |
| PRIORITY APPLN. INFO.:   |                    |           | GB 1988-27820 A                 | 19881129 |
|                          |                    |           | GB 1988-27821 A                 | 19881129 |
|                          |                    |           | GB 1988-27822 A                 | 19881129 |
|                          |                    |           |                                 | 19891113 |
|                          |                    |           |                                 | 19891113 |
|                          |                    |           | US 1991-704746 A3               | 19910523 |
|                          |                    |           | US 1992-973871 A3               | 19921110 |
|                          |                    |           | US 1993-131817 A3               | 19931005 |
| ASSIGNMENT HISTORY FOR U | S PATENT           | AVAILABLE | IN LSUS DISPLAY FORMAT          |          |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 113:212014

GΙ For diagram(s), see printed CA Issue.

AΒ The title compds. [I; R = H, alkyl; X1:X2 = CH:CH, CH:N, N:CH; Y = H, alkyl, cycloalkyl, alkenyl, alkynyl, (un)substituted aryl, aralkyl; Z = (un)substituted

(oxo)quinolinyl, (oxo- or thioxo)quinazolinyl, (oxo- or dioxo)quinoxalinyl] were prepared as retinoic acid metabolism inhibitors, aromatase inhibitors, etc. Thus, 3,4-dihydroquinolin-2(1H)-one was stirred 2 h at 70° with BzCl in DMF containing AlCl3 and the product reduced by NaBH4 to give hydroxymethylquinolinone II (R1 = Ph, R2 = OH). II (R1 = Me, R2 = OH) was stirred overnight with SOCl2 in THF and the product II (R1 = Me, R2 = Cl) stirred overnight at  $60-70^{\circ}$  with 1H-imidazole in DMSO to give II (R1 = Me, R2 = imidazolo) which maintained plasma levels of i.v. administered all-trans-retinoic acid at  $\geq 10$  ng/mL in rats 2 h after oral administration of 40 mg/kg.

IT 130347-04-5p 130347-06-7p 130347-14-7p 130347-20-5p

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as retinoate metabolism and aromatase inhibitor) 130347-04-5 HCAPLUS

2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)ethyl]-, 4-oxide (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \end{array} \begin{array}{c} \text{N} \\ \text{CH} \end{array} \begin{array}{c} \text{O} \\ \text{N} \\ \text{O} \end{array} \begin{array}{c} \text{O} \\ \text{C-Ph} \\ \text{O} \end{array}$$

RN

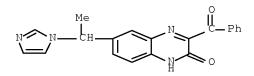
CN

RN 130347-06-7 HCAPLUS CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-, 4-oxide (CA INDEX NAME)

RN 130347-14-7 HCAPLUS
CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)-2-methylpropyl](CA INDEX NAME)

$$\begin{array}{c} \text{N} & \text{Pr} \\ \text{N} & \text{CH} & \text{N} \\ \end{array}$$

RN 130347-20-5 HCAPLUS CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)ethyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS

RECORD (43 CITINGS)

L17 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:152450 HCAPLUS Full-text

DOCUMENT NUMBER: 88:152450

ORIGINAL REFERENCE NO.: 88:24021a,24024a

TITLE: Carbostyril derivatives

INVENTOR(S): Yoshizaki, Shiro; Sakano, Kazuhisa; Ishikawa, Hiroshi;

Nakagawa, Kazuyuki

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. |   | DATE     |
|------------------------|------|----------|-----------------|---|----------|
|                        |      |          |                 |   |          |
| JP 53005175            | A    | 19780118 | JP 1976-58040   |   | 19760519 |
| JP 59036621            | В    | 19840905 |                 |   |          |
| PRIORITY APPLN. INFO.: |      |          | JP 1976-58040   | Α | 19760519 |
| GI                     |      |          |                 |   |          |

Eighteen carbostyril derivs. I (R, R1 = H, halo, NO2, NH2, OH, SO3H, cyano, alkyl, F3C, CO2H; both R and R1 are not H; R2, R3, R4 = H, alkyl) were prepared by proper chemical reactions of I (R = R1 = H). I were evaluated for their  $\beta$ -adrenergic nerve-stimulating activity with isolated guinea pig bronchi and atria. Thus, 0.14 g Cl in AcOH was added to 0.58 g 8-hydroxy-5-(2-isopropylamino-1-hydroxybutyl)carbostyril in AcOH-CC14 at -5° to 0° and the mixture stirred 1 h to give 0.53 g 7-chloro-8-hydroxy-5-(2-isopropylamino-1-hydroxybutyl)carbostyril HCl. IT 66283-41-8P

RN 66283-41-8 HCAPLUS

CN 2(1H)-Quinolinone, 7-ethyl-8-hydroxy-5-[1-hydroxy-2-[(1-methylethyl)amino]butyl]-, hydrobromide (1:1) (CA INDEX NAME)

 $\color{red} \bullet \text{ HBr}$ 

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## => d his nofile

|     | FILE 'REGISTRY' ENTERED AT 14:36:20 ON 05 JAN 2010  |
|-----|---|
| L1  | STR   |
| L3  | 127284 SEA SSS FUL L1   |
| L6  | STR   |
| L9  | STR   |
| L11 | 87 SEA SUB=L3 SSS FUL L6 AND L9   |
| L12 | STR   |
| L13 | 48 SEA SUB=L11 SSS FUL L12  |
|     |   |
| L14 | FILE 'HCAPLUS' ENTERED AT 14:44:45 ON 05 JAN 2010<br>8 SEA ABB=ON PLU=ON L13<br>D STAT QUE L14<br>D IBIB ABS HITSTR L14 1-8 |
|     |   |
|     | FILE 'REGISTRY' ENTERED AT 14:48:43 ON 05 JAN 2010  |
| L15 | 39 SEA ABB=ON PLU=ON L11 NOT L13  |
|     |   |
|     | FILE 'HCAPLUS' ENTERED AT 14:48:48 ON 05 JAN 2010   |
| L16 | 5 SEA ABB=ON PLU=ON L15   |
| L17 | 5 SEA ABB=ON PLU=ON L16 NOT L14   |
|     | D STAT QUE L17  |
|     | D IBIB ABS HITSTR L17 1-5   |

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